

IN THE CLAIMS

1. (Previously Presented) A rotor assembly for an electrical machine comprising:
 - a body of generally cylindrical shape said body having an inner opening, wherein a plurality of slots are provided in the body, said plurality of slots extending from said inner opening towards the outer periphery of said body;
 - permanent magnets disposed in said plurality of slots;
 - wherein at least one of said plurality of slots comprises an end section near the outer periphery of said body, the end section having an area of enlarged width.
2. (Previously Presented) A rotor assembly according to Claim 1 wherein said plurality of slots are closed at said end sections near the outer periphery of said body.
3. (Previously Presented) A rotor assembly according to Claim 1 wherein said permanent magnets terminate short of said end section.
4. (Previously Presented) A rotor assembly according to Claim 1 wherein said permanent magnets extend into said end section.
5. (Previously Presented) A rotor assembly according to Claim 1 wherein said end section is filled by a medium having no magnetic properties.

6. (Previously Presented) A rotor assembly according to Claim 1 wherein said body comprises a magnetic core.
7. (Previously Presented) A rotor assembly according to Claim 1 wherein said plurality of slots extend generally radially through said body.
8. (Previously Presented) A rotor assembly according to Claim 1, wherein said inner opening is configured for coaxially mounting said body on a shaft.
9. (Previously Presented) A rotor assembly according to Claim 8 wherein said body is mounted on said shaft by a hub.
10. (Previously Presented) A rotor assembly according to Claim 9 wherein said hub comprises a non-magnetic material.
11. (Previously Presented) A rotor assembly according to Claim 1 wherein the outer periphery of said body has a convex shape between two adjacent permanent magnets.
12. (Previously Presented) A permanent magnet motor comprising

a rotor assembly with a body of generally cylindrical shape having an inner opening; a plurality of slots provided in said body, wherein the slots extend from the inner opening towards the outer periphery of said body and wherein at least one of said slots comprises an end section near the outer periphery of the body said end section having an enlarged width; permanent magnets disposed in said slots; and a stator.

13. (Previously Presented) A rotor assembly according to Claim 2 wherein said plurality of slots include recesses.

14. (Previously Presented) A rotor assembly according to Claim 7 wherein said permanent magnets disposed in said plurality of slots extend generally radially through said body.

15. (Previously Presented) A rotor assembly according to Claim 1 wherein the outer periphery of said body has a concave shape between two adjacent permanent magnets.

16. (Previously Presented) A method of improving the performance of an electric machine comprised of a stator and a rotor assembly with a body of generally cylindrical shape having an inner opening, the method including the steps of:

(a) providing a plurality of slots in the rotor assembly wherein the plurality of slots extend from the inner opening towards the outer periphery of the rotor assembly;

(b) disposing permanent magnets in the plurality of slots;

(c) enlarging the area of an end section of at least one of the plurality of slots to thereby improve the performance of the electric machine.

17. (Previously Presented) The method of Claim 16 wherein each slot in said plurality of slots has an area of enlarged width.

18. (Previously Presented) The method of Claim 16 wherein the step of disposing permanent magnets further includes adjusting the length of each permanent magnet.

19. (Previously Presented) The method of Claim 18 wherein adjusting the length of each permanent magnet comprises fully extending the permanent magnet into the end section.

20. (Previously Presented) The method of Claim 18 wherein adjusting the length of each permanent magnet comprises partially extending the permanent magnet into the end section.

21. (Previously Presented) The method of Claim 18 wherein adjusting the length of each permanent magnet comprises no extension of the permanent magnet into the end section.